

#### STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

#### 401 CHURCH STREET L & C ANNEX 6TH FLOOR NASHVILLE TN 37243-1534

December 1, 2009

Mr. Kong Phonhthongsy, Owner Phonthongsy Farm 303 Big Springs Road Bell Buckle, TN 37020

Re: State Operating Permit No. SOP-09033

**Phonthongsy Farm** 

Bell Buckle, Bedford County, Tennessee

Dear Mr. Phonhthongsy:

In accordance with the provisions of the "Tennessee Water Quality Control Act" (Tennessee Code Annotated Sections 69-3-101 through 69-3-120) the enclosed State Operating Permit is hereby issued by the Division of Water Pollution Control. The continuance and/or reissuance of this Permit is contingent upon your meeting the conditions and requirements as stated therein.

Please be advised that you have the right to appeal any of the provisions established in this State Permit, in accordance with Tennessee Code Annotated, Section 69-3-110, and the General Regulations of the Tennessee Water Quality Control Board. If you elect to appeal, you should file a petition within thirty (30) days of the receipt of this permit.

If you have questions, please contact the Division of Water Pollution Control at your local Environmental Field Office at 1-888-891-TDEC; or, at this office, please contact Ms. Erin O'Brien at (615) 253-2245 or by E-mail at *Erin.O'Brien@tn.gov*.

Sincerely

V∕ojîn Janjić

Manager, Permit Section

Division of Water Pollution Control

SOP-09033

P/WAT/5S

**Enclosure** 

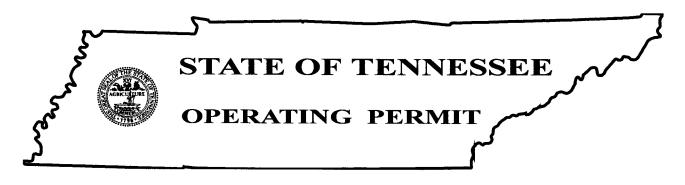
CC:

Division of Water Pollution Control, Permit Section

Division of Water Pollution Control, Columbia Environmental Field Office

TDA, Attn: Dr. Sam Marshall

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#### No. SOP-09033

Issued By

Tennessee Department of Environment and Conservation
Division of Water Pollution Control
401 Church Street
6th Floor, L & C Annex
Nashville, Tennessee 37243

In accordance with the provisions of Tennessee Code Annotated Section 69-3-108 and regulations promulgated pursuant thereto:

permission is hereby granted to: Phonthongsy Farm, a poultry supplier to Tyson Foods

for the operation of: a no discharge concentrated animal feeding operation (CAFO) which stores

all manure, litter, and/or process wastewater in covered storage

from a facility located: at 303 Big Springs Road in Bell Buckle, Bedford County, Tennessee

near receiving waters named: unnamed tributary to North Fork Creek

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on: January 1, 2010

This permit shall expire on: December 31, 2014

Issuance date: November 30, 2009

Paul E. Davis, Director

Division of Water Pollution Control

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#### A. AUTHORIZATION

Phonthongsy Farm, a poultry supplier to Tyson Foods, located at 303 Big Springs Road in Bell Buckle, Bedford County, Tennessee, is authorized to operate a concentrated animal feeding operation (CAFO), which is located near unnamed tributary to North Fork Creek. Phonthongsy Farm does not store liquid manure; therefore, this permit does not authorize the discharge of process wastewater pollutants to waters of the State of Tennessee. This CAFO must have all measures, structures, etc. in place and fully implemented, according to the site-specific nutrient management plan (NMP) approved by the Tennessee Department of Agriculture, on the permit effective date. The following effluent limitations apply.

#### B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The 100-year, 24-hour rainfall event applies to this operation because this operation is a new source, by definition. However, all manure, litter, and/or process wastewater is stored in a structure designed to exclude all stormwater, so the design storm has no impact on the waste storage facilities. The permittee shall attain the limitations and requirements of this permit as of the effective date of this permit for the following areas.

#### 1. Production Areas

All wastewater discharges from a CAFO production area to waters of the State of Tennessee are prohibited. Permitted facilities must be properly designed, constructed, maintained, and operated to contain:

- a. All process wastewater resulting from the operation of the CAFO (such as wash water, parlor water, watering system overflow, etc.); plus,
- b. All contaminated runoff from a 100-year, 24-hour rainfall event for a new hog or poultry CAFO.

#### 2. Land Application Areas

All waste is exported to a 3<sup>rd</sup> party. Land application of waste by the permittee is not authorized under this permit.

#### 3. Rainfall Monitoring

A rain gauge shall be kept on site and properly maintained. Amounts of rainfall shall be recorded for all rainfall events, as defined in subpart I.G. below.

#### C. DRY LITTER STORAGE

At no time shall litter be stored in a manner which would allow rain/stormwater to come in contact with the dry litter removed from the houses.

#### 1. Discharge Notification

If for any reason, there is a discharge to a water body of the state, the permittee shall make immediate oral notification within 24-hours to the Division of Water Pollution Control (division) and notify the division in writing within five working days of the discharge from the facility. In addition, the permittee shall keep a copy of the notification submitted to the division together with the NMP. The notification shall include the following information:

- a. Description of the discharge: A description and cause of the discharge, including a description of the flow path to the receiving water body. Also, an estimation of the flow rate and volume discharged.
- b. Time of the discharge: The period of discharge, including exact dates and times, and the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the discharge.
- c. Cause of the discharge: If caused by a precipitation event(s), information from the onsite rain gauge concerning the size of the precipitation event must be provided.

#### 2. Discharge Sampling

In the event of any overflow, bypass, or other discharge from this facility, the following actions shall be taken:

a. Analysis of the discharge: All discharges shall be sampled and analyzed. Samples must, at a minimum, be analyzed for the following parameters stated in the table below:

	MONITO REQUIREN	<del>-</del>
<b>EFFLUENT</b>	*	SAMPLE
CHARACTERISTIC	FREQUENCY	TYPE
FLOW	1/Discharge	Estimate
pH**	1/Discharge	Grab**
BOD5	1/Discharge	Grab
TOTAL SUSPENDED	1/Discharge	Grab
SOLIDS (TSS)		
NITROGEN, TOTAL	1/Discharge	Grab
NITROGEN, AMMONIA	1/Discharge	Grab
TOTAL		
TOTAL KJELDAHL NITROGEN	1/Discharge	Grab
NITROGEN NITRATE TOTAL (AS N)	1/Discharge	Grab
PHOSPHORUS, TOTAL	1/Discharge	Grab
PHOSPHORUS, DISSOLVED	1/Discharge	Grab
E. COLI	1/Discharge	Grab

<sup>\*</sup> Flow shall be reported in Million Gallons per Day (MGD)

<sup>\*\*</sup> pH analysis shall be performed within fifteen (15) minutes of sample collection.

- b. Volume of the discharge: An estimate of the volume of the release and the date and time.
- c. Sampling procedures: Samples shall consist of grab samples collected from the overflow or discharges from the retention structure. A minimum of one sample shall be collected from the initial discharge (within 30 minutes).
- d. Reasons for not sampling: If conditions are not safe for sampling, the permittee must provide documentation of why samples could not be collected. However, once the unsafe conditions have passed, the permittee shall collect a sample for the retention structure (pond or lagoon) within 30 minutes.

The permittee is required to comply with the special conditions established in Part III of this permit.

#### 3. Additional Discharge Monitoring

In the event of a discharge from the wastewater retention structure or from a land application site, additional monitoring requirements and conditions include:

- a. There shall be no distinctly visible floating scum, oil or other matter contained in the wastewater discharge. The wastewater discharge must not cause an objectionable color contrast in the receiving stream.
- b. The wastewater discharge shall not contain pollutants in quantities that will be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.
- c. Sludge or any other material removed by any treatment works must be disposed of in a manner which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material must be in compliance with the Tennessee Solid Waste Disposal Act, TCA 68-31-101 et seq. and the Tennessee Hazardous Waste Management Act, TCA 68-46-101 et seq.

#### D. MONITORING PROCEDURES

#### 1. Representative Sampling

Samples and measurements taken in compliance with the monitoring requirements specified herein shall be representative of the volume and nature of the discharge, and shall be taken prior to mixing with uncontaminated stormwater runoff or the receiving stream.

#### 2. Test Procedures

Monitoring results must be conducted according to test procedures specified in TDEC Rule 1200-4-5-.07.

#### 3. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date and time of sampling;
- b. The exact person(s) collecting samples;

- c. The dates and times the analyses were performed;
- d. The person(s) or laboratory who performed the analyses;
- e. The analytical techniques or methods used, and;
- f. The results of all required analyses.

#### E. INSPECTION, RECORD KEEPING, AND REPORTING

#### 1. Inspections

Daily inspections of all water lines, including process wastewater, drinking and cooling water are required.

Weekly inspections are also required for all stormwater diversion devices, runoff diversion structures and devices channeling contaminated stormwater to the wastewater and manure storage and containment structure.

#### 2. Record Keeping

The following records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation, shall be retained on site for a minimum of five years, or longer, if requested by the division:

- a. A copy of the CAFO's nutrient management plan and records of its annual review;
- b. Records documenting the following visual inspections:
  - i. Weekly inspections of all stormwater diversion devices, and
  - ii. Daily inspections of water lines, including drinking or cooling water lines.
- c. Records documenting any corrective actions taken (if deficiencies are not corrected within 30 days of notice of deficiency, the records must include an explanation of the factors preventing immediate correction);
- d. Records of mortalities management and practices used to comply with the nutrient management plan and NRCS Conservation practice Standards 316 and 317, per the requirements of TDEC Rule 1200-4-5-.14(16)(b);
- e. Records documenting the current design of any manure or litter storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity;
- f. Test methods used to sample and analyze manure, litter, and/or process wastewater,
- g. Results from manure, litter, and/or process wastewater;
- h. A log of all measurable rainfall events.

#### 3. Annual Report

The permittee must submit an annual report between January 1 and February 15 to both TDA and TDEC that includes:

a. The number and types of animals on site whether in open confinement or housed under roof;

- b. Estimated amount of total manure and/or litter generated by the CAFO in previous calendar year (tons);
- c. Estimated amount of total manure, and/or litter transferred to a third party by the CAFO in the previous calendar year (tons);
- d. Total number of acres for land application covered by the nutrient management plan;
- e. Total number of acres under control of the CAFO that were used for land application of manure and/or litter in the previous calendar year;
- f. A summary of all manure and/or litter discharges to waters of the state from the production area that have occurred in the previous calendar year, including date, time, and approximate volume; and
- g. A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner.

#### 4. Falsifying Reports

Knowingly making any false statement on any report required by this permit may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Water Pollution Control Act, as amended, and in Section 69-3-115 of the Tennessee Water Quality Control Act.

#### F. SCHEDULE OF COMPLIANCE

Full compliance and operational levels shall be attained from the effective date of this permit.

#### G. **DEFINITIONS**

An **animal feeding operation** (AFO) is a facility that (1) stables, confines and feeds or maintains animals (other than aquatic animals) for a total of 45 days or more in any 12-month period and (2) does not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season over any portion of the facility. Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.

For the purpose of this permit, **annually** is defined as a monitoring frequency of once every twelve (12) months beginning with the date of issuance of this permit so long as the following set of measurements for a given 12 month period are made approximately 12 months subsequent to that time.

For the purpose of this permit, a **calendar day** is defined as any 24-hour period from midnight to midnight or any other 24-hour period that reasonably approximates the midnight-to-midnight time period.

A **catastrophic event** is a rainfall event greater than the 24-hour, 25-year storm for existing CAFOs or new dairy or cattle CAFOs, or the 100-year, 24-hour rainfall event for a new hog or poultry CAFOs, or the occurrence of a tornado or other severe event as determined by the division which would cause an overflow from the waste retention structure that is designed, constructed, operated, and maintained to meet all the requirements of this permit.

A comprehensive nutrient management plan (CNMP) is a conservation plan that is unique to animal feeding operations. It is a grouping of conservation practices and management activities which, when implemented as part of a conservation system, will help to ensure that both production and natural

resource protection goals are achieved. Guidance for developing a CNMP is located in USDA-NRCS's National Planning Procedures Handbook.

A concentrated animal feeding operation (CAFO) means an "animal feeding operation" which meets the criteria in 40 Code of Federal Regulations Part 122, or which the director designates as a significant contributor of pollution pursuant to TDEC Rule 1200-4-5.

A **chronic event** is a series of wet weather conditions that causes an overflow of process wastewater from a facility designed, constructed and operated to contain all process waste generated and rainfall and runoff from a 24-hour rainfall event for the location of the point source.

**Discharge** or **discharge** of a pollutant refers to the addition of pollutants to waters from a source.

Land application area means the land under the control of an AFO owner or operator to which manure, litter or process wastewater from the AFO production area is or may be applied.

A large CAFO (Class I CAFO) is an AFO that confines greater than or equal to the number of animals specified in table 1200-4-5-.14.1.

The term **manure** is defined to include manure, bedding, compost and raw materials or other materials commingled with manure or set aside for disposal.

A **medium CAFO** (Class II CAFO) is an AFO that confines greater than or equal to the number of animals specified in table 1200-4-5-.14.1 and also meets the criteria of 1200-4-5-.14 (3).

The NRCS is the United States Department of Agriculture, Natural Resources Conservation Service.

**Owner or operator** means any person who owns, leases, operates, controls or supervises a source.

**Production Area** means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas.

- The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milk rooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways associated with barns or barnyards, and stables.
- The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. If an AFO stores manure in the field (i.e., manure or litter piled for more than several days before land application occurs), the field storage is considered to be a production area. Note that manure or litter stored uncovered for more than two weeks is not considered to be short-term or temporary storage, and is included in the definition of production area.
- The raw materials storage area includes but is not limited to feed silos, silage bunkers, and organic bedding materials.
- The waste containment area includes but is not limited to settling basins, and areas within berms and diversions that separate uncontaminated stormwater.
- The production area also includes any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

**Process wastewater** means water that comes in contact with a production process, its raw materials, products or byproducts. This includes spillage, wash-water, and overflow from animal watering systems or contact-cooling water. In the case of AFOs, process water would include water that contacts manure, litter, feed, milk, eggs or bedding.

A rainfall event is defined as any occurrence of rain, preceded by 10 hours without precipitation that results in an accumulation of 0.01 inches or more. Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event. Ten -year, 24-hour rainfall event, 25-year, 24-hour rainfall event, and 100-year, 24-hour rainfall event are mean precipitation events with a probable recurrence interval of once in 10 years, or 25 years, or 100 years, respectively, as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or state rainfall probability information developed from this source.

**TDA** is the Tennessee Department of Agriculture.

**Setback** means a specified distance from surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: open tile line intake structures, sinkholes, and wells.

Unavailable Conditions exist where water quality is at, or fails to meet, the criterion for one or more parameters.

Waters means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.



#### A. DUTY TO COMPLY

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Water Quality Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

#### B. DUTY TO REAPPLY

The permittee is not authorized to operate after the expiration date of this permit. In order to receive authorization to operate beyond the expiration date, the permittee shall submit such information and forms as are required to the director no later than 180 days prior to the expiration date.

#### C. PROPER OPERATION AND MAINTENANCE

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to

achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

#### D. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Causes for such permit action include but are not limited to the following:

- 1. Violation of any terms or conditions of the permit;
- 2. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; and
- 3. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

#### E. PROPERTY RIGHTS

This permit does not convey property rights of any sort, or any exclusive privilege.

#### F. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the commissioner, within a reasonable time, any information which the commissioner may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the commissioner upon request, copies of records required to be kept by this permit.

#### G. INSPECTION AND ENTRY

The permittee shall allow the commissioner, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the commissioner.

#### H. MONITORING, RECORDS AND REPORTING

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of

the sample, measurement, report or application. This period may be extended by request of the director at any time.

- 1. Records of monitoring information shall include:
  - a. the date, exact place, and time of sampling or measurements;
  - b. the individual(s) who performed the sampling or measurements;
  - c. the date analyses were performed;
  - d. the individual(s) who performed the analyses;
  - e. the laboratory where the analyses were performed;
  - f. the analytical techniques or methods used; and
  - g. the results of such analyses.
- 2. Monitoring results must be conducted according to test procedures approved under 40 CFR part 136.
- 3. Regular reporting (at a frequency of not less than once per year) to assure that compliance is being achieved will normally be required of the discharger in any permit as indicated below:
  - a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the commissioner. Monitoring may also be reported via electronic reporting methods established by the commissioner.
  - b. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or other reporting form specified by the commissioner.
  - c. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in the permit.

#### I. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to the commissioner shall be signed and certified by the persons identified in 1200-4-5-.05(6)(a-c), making the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### J. PLANNED CHANGES

The permittee will annually review and update the NMP and notify the director whenever there have been significant changes that affect the amount of manure produced, such as the number of animals on site; changes in how the manure is handled, stored, transferred, or land applied; or changes to how animal mortalities are handled.

The permittee shall give notice to the director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- 1. The alteration or addition to a permitted facility is considered a new source per 1200-4-5-.02 (54);
- 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged; or
- 3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices.

#### K. TRANSFERS

Individual permits are not transferable to any person except after notice to the commissioner, as specified below. The commissioner may require modification or revocation and reissuance of the permit to change the name of the permittee.

- 1. The permittee notifies the commissioner of the proposed transfer at least 30 days in advance of the proposed transfer date.
- 2. The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and liability between them.
- 3. The permittee must provide the following information to the commissioner in their formal notice of intent to transfer ownership:
  - a. The permit number of the subject permit;
  - b. The effective date of the proposed transfer;
  - c. The name and address of the transferor;
  - d. The name and address of the transferee;
  - e. The names of the responsible parties for both the transferor and transferee;
  - f. A statement that the transferee assumes responsibility for the subject permit;
  - g. A statement that the transferor relinquishes responsibility for the subject permit;
  - h. The signatures of the responsible parties for both the transferor and transferee pursuant to the signatory requirements of this part; and
  - i. A statement regarding any proposed modifications to the facility, its operations, or any other changes, which might affect the permit, limits and conditions contained in the permit.

#### L. Bypass

Bypass, as defined by 1200-4-5-.02(1), is prohibited unless:

- 1. bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- 2. there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- 3. for anticipated bypass, the permittee submits prior notice, to the Division, if possible at least ten days before the date of the bypass; or

4. for unanticipated bypass, the permittee submits notice to the Division of an unanticipated bypass within 24 hours from the time that the permittee becomes aware of the bypass.

A bypass that does not cause effluent limitations to be exceeded may be allowed only if the bypass is necessary for essential maintenance to assure efficient operation.

#### M. OVERFLOW

Overflows as defined by 1200-4-5-.02 are prohibited.

#### N. NONCOMPLIANCE

In the case of any noncompliance which could cause a threat to human health or the environment, the permittee shall report the noncompliance to the commissioner within 24 hours from the time the permittee becomes aware of the circumstances. A written submission must be provided within five days of the time the permittee becomes aware of the noncompliance. The permittee shall provide the following information:

- 1. A description of, and the cause of the noncompliance;
- 2. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue;
- 3. The steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

#### O. UPSET

An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1. An upset occurred and that the permittee can identify the cause(s) of the upset;
- 2. The permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;
- 3. The permittee submitted information required under "Reporting of Noncompliance" within 24 hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days); and
- 4. The permittee complied with any remedial measures required under "Adverse Impact."

#### P. ADVERSE IMPACT

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### Q. LIABILITIES

#### 1. Civil and Criminal Liability

Except as provided in permit conditions nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of wastewater to any surface or subsurface waters. Additionally, notwithstanding this permit, it shall be the responsibility of the permittee to conduct its wastewater treatment and/or discharge activities in a manner such that public or private nuisances or health hazards will not be created.

#### 2. Liability Under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or the Federal Water Pollution Control Act, as amended.

**PART III** 

#### **OTHER REQUIREMENTS**

#### A. REOPENER CLAUSE

If an applicable standard or limitation is promulgated under TDEC Rule 1200-4-5 and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked and reissued to conform to that effluent standard or limitation.

#### B. NUTRIENT MANAGEMENT PLAN (NMP)

The permittee has developed and submitted for state approval from TDA a nutrient management plan (NMP). The NMP was prepared in accordance with NRCS Field Office Conservation Practice Standards and/or the NRCS Animal Waste Handbook. The NMP must be kept on site. The NMP is available for public review at the Nashville central office, the Columbia Environmental Field Office and the TDA Ellington Agriculture Center. The permittee must have all measures, structures, etc., of the NMP in place and fully implemented upon the permit effective date.

In addition to NRCS technical standards, the plan must address facility maintenance until all manure and/or litter is transferred to a third party or land applied in accordance with the comprehensive nutrient management plan.

The permittee will annually review and update the NMP whenever there have been significant changes that affect the amount of manure produced, such as the number of animals on site; changes in how the manure is handled, stored, transferred, or land applied; or changes to how animal mortalities are handled. The permittee shall notify the director of these changes per

subpart II. J. An operator desiring to make changes to their NMP shall notify and receive approval from TDA.

#### C. BEST MANAGEMENT PRACTICES (BMPS)

The division has determined that the following BMPs, beyond those contained in the Nutrient Management Plan (NMP), are necessary to protect the classified uses of the streams and water quality in Tennessee.

- 1. Wastewater control and retention structures or holding pens for new CAFOs and existing CAFOs that are intending to undergo significant expansion shall meet the construction requirements as identified in TDEC Rule 1200-4-5-.14(19).
- 2. Application of manure, litter, and/or process wastewater shall be applied in accordance with setbacks established for potable wells, public or private, as required by TDEC Rule 1200-4-5-.14(17).
- 3. The owner/operator shall prevent discharge of pesticide-contaminated waters into retention structures. All wastes from dipping vats, pest and parasite control units, and other facilities utilized for the management of potentially hazardous or toxic chemicals shall be handled and disposed of in a manner such as to prevent pollutants from entering the retention structures or waters of the state.
- 4. Chemicals, manure, litter, and/or process wastewater shall be managed to prevent spills. Procedures for cleaning up spills shall be developed and the necessary equipment to implement clean up shall be available to facility personnel.
- 5. The operator shall notify the division in the event of any significant fish, wildlife, or migratory bird/endangered species kill or die-off on or near retention ponds or in fields where waste has been applied, and which could reasonably have resulted from waste management at the facility.
- 6. Where employees are responsible for work activities which relate to permit compliance, those employees must be regularly trained in the proper operation and maintenance of the facility and waste disposal. Training shall include topics as appropriate such as land application of wastes, proper operation and maintenance of the facility, good housekeeping and material management practices, necessary record-keeping requirements, and spill response and clean up. The permittee is responsible for determining the appropriate training frequency for personnel and the nutrient management plan shall identify periodic dates for such training.
- 7. Uncontaminated stormwater runoff shall be diverted away from manure, litter, process wastewater, waste retention structures, and mortality management areas, i.e. under floor pits, composters, etc.

#### D. TRANSFER TO THIRD PARTY

The permittee must provide the recipient of the manure, litter or process wastewater with the most current nutrient analysis, and ensure that the third party signs the Agreement for the Removal of Litter, Manure and/or Process Wastewater from an AFO form (Appendix A) if transferring any manure, litter or process wastewater to a third party.

In cases where CAFO-generated manure is sold or given away to be used for land application activities that are not under the control of the permitted CAFO, land application does not need to

be addressed in the permitted CAFO NMP. However, for operations that transfer any manure, litter and process wastewater per year to a third party for disposal the following documentation must be provided to or by the third party and maintained on site:

- 1. Most recent manure nutrient analysis provided to the third party to be used in determining the appropriate land application rates;
- 2. Records showing the amount of manure that leaves the permitted operation;
- 3. Recipient's name, date and address for the transfer of quantities greater than one pick-up truck load and/or approximate amount of manure removed must be recorded on the form given in Appendix B;
- 4. The third party must sign the Agreement for the Removal of Litter, Manure and/or Process Wastewater from an AFO form (Appendix A);
- 5. Any other information requested by the director.

#### E. CLOSURE PLAN

The permittee must fully implement the closure/rehabilitation plan for the facility, including any waste system storage/treatment structure(s), within 12 months of ceasing operation.

The closure of waste system storage/treatment structure(s) must meet or exceed applicable NRCS technical standards and guidelines.

#### F. MORTALITY MANAGEMENT

The permittee must ensure proper management of mortalities (i.e. dead animals). At a minimum, the requirements of NRCS conservation practice standards 316 (Animal Mortality Facility) and 317 (Composting Facility) must be followed.

The following requirements apply to facilities composting animal mortalities, where:

- Organic waste material is generated by agricultural production or processing.
- A composting facility is a component of a planned agricultural waste management system.
- A composting facility can be constructed, operated, and maintained without polluting air and/or water resources.

#### 1. Laws and Regulations

The installation and operation of the composting facility shall comply with all federal, state, and local laws and regulations. The producer will be responsible for securing any necessary permits to install structures and for properly managing the facility on a daily basis.

The Tennessee Department of Environment and Conservation (TDEC), Division of Solid Waste Management, has the authority to regulate commercial compost operations in Tennessee. No permits are required for on-farm composting operations where the compost is considered to be part of normal farming operations and used on the same farm as part of agronomic or horticultural operations. Under the current TDEC Solid Waste Processing and Disposal Rules (Chapter 1200-1-7), all other composting facilities require a permit from TDEC.

#### 2. Safety

Safety and personal protection features and practices shall be incorporated into the facility and its operation as appropriate to minimize the occurrence of equipment hazards and biological agents during the composting process.

#### 3. Facility Siting

The bottom elevation of the composting facility shall be above the seasonal high water table and on soils with an acceptable permeability that do not allow materials to contaminate the ground water, and meets all applicable regulations, or the facility shall be installed on concrete slabs or other appropriate liners. The composting facility shall not be located in a floodplain unless protected from inundation or damage from a 25-year frequency flood event, or larger.

Composting facilities shall be located as near the source of organic waste as practical. Locate compost facilities so prevailing winds and landscape elements such as building arrangement, landforms, and vegetation minimize odors and protect the visual resource.

Surface runoff shall be diverted away from the compost facility. Divert contaminated runoff from compost facilities to an appropriate storage or treatment facility for further management.

#### 4. Facility Size

The composting facility shall be designed to provide storage for the amount of raw material planned for active composting, space required for curing, and the space for the maximum length of time anticipated between emptying events or storage period. The minimum storage period shall be based on the timing required for the composting process and environmentally safe waste utilization considering the climate, crops, soil, equipment, and local, state, and federal regulations. Composted material shall be protected from the weather by roofs or other suitable covers.

Dimensions selected for elements of the compost facility shall accommodate equipment used for loading, unloading, and aeration.

Sizing of facilities for composting dead animals shall be based on normal mortality loss records of the operation. If not available, locally established mortality rates for the type of operation shall be used.

#### 5. Facility Type

Selection of the composting facility/method shall be based on the availability of raw material, the desired quality of final compost, equipment, labor time, and land available. The composting method (aerated windrow, static pile, and in-vessel) shall meet the requirements of the Agricultural Waste Management Field Handbook (AWMFH), Chapter 10, and National Engineering Handbook, Part 637, Chapter 2, Composting.

Facility structural elements such as permanent bins, concrete slabs, and roofs shall meet the requirements of Conservation Practice Standard 313, Waste Storage Facility.

#### 6. Compost Mix

Develop a compost mix that encourages aerobic microbial decomposition and avoids nuisance odors.

#### 7. Carbon-Nitrogen Ratio

The initial compost mix shall result in a Carbon to Nitrogen (C:N) ratio between 25:1 and 40:1. See Table 10-6 in the Agricultural Waste Management Field Handbook (AWMFH) for typical C:N ratios of common composting amendments. Compost with a greater carbon to nitrogen ratio can be used if nitrogen immobilization is not a concern.

#### 8. Carbon Source

A dependable source of carbonaceous material shall be stored and available to mix with the nitrogen rich waste materials.

#### 9. Bulking Materials

Add bulking materials to the mix as necessary to enhance aeration. The bulking material may be the carbonaceous material used in the mix or a non-biodegradable material that is salvaged at the end of the compost period. If a non-biodegradable material is used, provision such as screening shall be made for salvage.

#### 10. Moisture

Provision shall be made for maintaining adequate moisture in the compost mix throughout the compost period within the range of 40 to 65 percent (wet basis). Water used for moisture control must be free of deleterious substances. Care shall be taken to prevent excess moisture from accumulating in the compost.

#### 11. Temperature of Compost Mix

Manage the compost to attain and then maintain the internal temperature for the duration required to meet management goals.

When the management goal is to reduce pathogens, the compost shall attain a temperature greater than 130°F for at least five days as an average throughout the compost mass.

This temperature and time criterion may be achieved during either primary or secondary composting stages or as the cumulative time of greater than 130°F. in both stages.

#### 12. Turning/Aeration

The frequency of turning/aeration shall be appropriate for the composting method used and to attain the desired amount of moisture removal and temperature control, while maintaining aerobic degradation.

#### 13. Compost Period

Continue the composting process long enough for the compost mix to reach the stability level where it can be safely stored without undesirable odors. It shall also possess the desired characteristics for its use, such as lack of noxious odor, desired moisture content, level of decomposition of original components, and texture. The compost period shall involve primary and secondary composting as required to achieve these characteristics.

Test the finished compost as appropriate to assure that the required stabilization has been reached.

#### 14. Use of Finished Compost

Land application of finished compost shall be in accordance with conservation practice standards Nutrient Management, Code 590, and Waste Utilization, Code 633.

#### 15. Additional Criteria for Dead Bird Composting

All dead bird composters shall have the following features:

- a. <u>Roof</u>: While composting of some material may be accomplished in the open, it does not work well with dead bird composts. A roof ensures year round operation and controls rainwater and percolation. The roof structure shall be designed for applicable wind and dead loads for agricultural buildings, according to local building codes. Wind and snow loads shall be calculated using American Society of Agricultural Engineers (ASAE) practice standard ASAE EP288.4. Post and beam design shall be in accordance with procedure described in the National Forest Products Association's National Design Specification for Wood Construction. Post embedment design shall be in accordance with ASAE practice standard ASAE EP486.
- b. Concrete Floor: This is critical to all weather operations, secures the composter against rodents, dogs, etc., and prevents contamination of the surrounding area. Concrete slab design shall consider the required performance and critical applied loads along with both the subgrade material and material resistance of the concrete slab. Where applied point loads are minimal and the subgrade is uniform and dense, the minimum slab thickness shall be 4 inches with a maximum joint spacing of 15 feet. Joint spacing can be increased if steel reinforcing is added based on subgrade drag theory, as discussed in industry guidelines such as American Concrete Institute, ACI 360, Design of Slabs on Grade.
- c. <u>Building Materials</u>: All lumber in contact with the ground or compost shall be pressuretreated in accordance with ASTM D 1760-96. All metal used in the structure shall be galvanized or otherwise protected from corrosion.
- d. <u>Facility Size</u>: The volume required for composting is dependent on estimated mortality rates, market weight, number of animals, days to reach market weight, and a volume factor. Volume shall be calculated using equation 10-22 in the AWMFH. Table 10-7 of the AWMFH provides suggested mortality rates for various poultry types. A volume

factor of 2.5 is recommended for use. Composting facilities shall include a primary composting unit into which alternate layers of low moisture content manure, carbon source material (straw is common), and dead animal carcasses are placed. A secondary composting unit is often necessary to complete the composting process.

e. <u>Temperature</u>: A minimum temperature of 130°F. shall be reached during the composting process. If this temperature is not reached, the resulting compost shall be incorporated immediately after land application.

#### 16. Plans and Specifications

Plans and specifications shall be prepared in accordance with the criteria of this section and shall describe the requirements for applying the practice to achieve its intended purpose.

#### 17. Operation and Maintenance

An operation and maintenance (O&M) plan shall be developed consistent with the purposes of this standard, its intended life, safety requirements, and the criteria for its design. The O&M plan shall include recipe ingredients and sequence that they are layered and mixed, maximum and minimum temperature for operation, land application rates, moisture level, management of odors, testing, etc. Make adjustments throughout the composting period to ensure proper composting processes.

The compost facility should be inspected regularly when the facility is empty. Replace deteriorated wooden materials or hardware. Patch concrete floors and curbs as necessary to assure water tightness. Roof structures should be examined for structural integrity and repaired as needed. Exposed metal components should be inspected for corrosion. Corroded metal should be wire brushed and painted as necessary.

Closely monitor temperatures above 165°F. Take action immediately to cool piles that have reached temperatures above 185°F.

The operation and maintenance plan shall state that composting is a biological process. It requires a combination of art and science for success. Hence, the operation may need to undergo some trial and error in the start-up of a new composting facility.

#### APPENDIX A

Agreement for the Removal of Litter, Manure and/or Process Wastewater from an AFO

Th	e conditions listed below help to protect water quality. These conditions apply to litter, manure and/or
pro	cess wastewater removed from an AFO. The material covered by this agreement was removed on
(da	te) from Phonthongsy Farm owned by Kong Phonhthongsy and located at 303 Big
Spi	rings Road, Bell Buckle, Bedford County, Tennessee.
A.	The litter, manure and/or process wastewater must be managed to ensure there is no discharge of
	litter, manure and/or process wastewater to surface or groundwater.
B.	When removed from the facility, litter, manure and/or process wastewater should be applied directly
	to the field or stockpiled and covered with plastic or stored in a building.
C.	Litter, manure and/or process wastewater must not be stockpiled near streams, sinkholes, wetlands or
	wells.
D.	Fields receiving litter, manure and/or process wastewater should be soil tested at least every two or
	three years.
E.	A litter, manure and/or process wastewater nutrient analysis should be used to determine application
	rates for various crops.
F.	Calibrate spreading equipment and apply litter, manure and/or process wastewater uniformly.
G.	Apply no more nitrogen or phosphorus than can be used by the crop.
H.	A buffer zone is recommended between the application sites and adjacent streams, lakes, ponds,
	sinkholes and wells.
I.	Do not apply litter, manure and/or process wastewater when the ground is frozen, flooded, saturated
	or on steep slopes subject to flooding, erosion or rapid runoff.
J.	Cover vehicles hauling litter, manure and/or process wastewater on public roads.
K.	Keep records of locations where poultry litter will be used as a fertilizer.
I,	am the person receiving litter and
	(name)
ao i	understand the conditions listed above.
	(signature) (date)
	(address) (phone)

#### APPENDIX B

Names of Persons and/or Firms That Remove Litter, Manure and/or Process Wastewater from **Phonthongsy Farm (SOP-09033)** 

Name:	Name:
Address:	Address:
Phone No.:	
Tons Removed:	Tons Removed:
Date:	Date:
Name:	Name:
Address:	A d.l
Phone No.:	Phone No.:
Tons Removed:	Tons Removed:
Date:	Data
Name:	Name:
Address:	Address:
	Address.
Phone No.:	Phone No.:
Tons Removed:	Tons Removed:
Date:	To a
Name:	Name:
Address:	Address:
Phone No.:	Phone No.:
Tons Removed:	Tons Removed:
Date:	Data
Name:	Name:
Address:	A J.J.,
Phone No.:	Diama Na
Tons Removed:	Tons Removed:
Date:	Date:
	D 1

B-1

#### APPENDIX C

Discharge Report Form

## PERMIT NUMBER: SOP-09033

DISCHARGE INFORMATION:

## DISCHARGE REPORT FORM

(NOTE: Read instructions before completing this form.) \* Required notification information per section I.B.3., Discharge Notification, may be included with this form. \*

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

TIME: VOLUME ESTIMATE DESCRIPTION: DURATION: DATE: FLOW RATE: CAUSE: 303 Big Springs Road
Bell Buckle, TN 37020
Phonthongsy Farm
Bedford County, Tennessee Attn: Mr. Kong Phonhthongsy Phonhthongsy Farm LOCATION ADDRESS FACILITY

PARAMETER	$\left\langle \right\rangle$	On/	QUANTITY OR LOADING			QUALITY OR CONCENTRATION	CENTRATION		FREQUENCY OF	YOF	CAMPIE TYPE	
	$\left\langle \right $	Average	Maximum	Units	Minimum	Average	Maximum	Units	ANALYSIS	S	SAMITLE 11	<u>u</u>
Flow. Total	SAMPLE MEASUREMENT	*****		(	****	****	****	*	01/DS		EST	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	DISCHARGE F	DISCHARGE PER DAY, Total	MGD	*****	*****	******		Once per Discharge	<u>د</u> و	Estimate	
Ha	SAMPLE MEASUREMENT	****	****	**	****	****			01/DS		GR	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	******	******	REPORT	<b>D</b>	Once per Discharge	5 Q	Grab	
BOD. 5-Day (20 Dea C)	SAMPLE MEASUREMENT	*****	*****	**	****	*****		-	01/DS		GR	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	******	***	*****	*****	REPORT		Once per Discharge	<b>≒ 2</b>	Grab	
Solids, Total	SAMPLE MEASUREMENT	*****	****	**	****	****			01/DS		GR	
Suspended EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	*****	****	*****	****	REPORT	J. G.	Once per Discharge	<b></b> ₽	Grab	
Nitrogen Total (as N)	SAMPLE MEASUREMENT	****	****	* * *	*****	****			01/DS		GR	
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	****	REPORT		Once per Discharge	اد م اد	Grab	
Nitrogen Ammonia	SAMPLE MEASUREMENT	*****	*****	***	****	*****			01/DS		GR	
Total (as NH4)  EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	*****	****	*****	******	REPORT	) E	Once per Discharge	<u>ہ</u> و	Grab	
Nitrogen Kjeldahl Total	SAMPLE MEASUREMENT	*****	****	* *	****	****		1	01/DS		GR	
(as N) EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	******	REPORT	9	Once per Discharge	<u>, a</u>	Grab	
Name/Title Principal Executive Officer		I certify under penalty of law that this document and	it this document and a	all attachments were	ere			Tel	Telephone		Date	
	designed information information information information information information information that the second testing information informati	prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and balled that show an elimitation submitted is.	supervision in accorda d personnel property f in my inquiry of the per ersons directly respon mitted is, to the best	ance with a syster stather and evaluation or persons wishe for gatherin of my knowledge	ate the who githe and and							
TYPED OR PRINTED	penalties imprisonn	Defect, fine, accurate, and competer rain aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	formation, including th	nere are signification of fire		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	EXECUTIVE O AGENT	AREA	NUMBER	YEAR	MONTH	DAY

# COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

#### **General Instructions**

- 1. If for any reason, there is a discharge to a water body of the state, the permittee shall make immediate oral notification within 24-hours to the Division of Water Pollution Control (division) and notify the division in writing within five working days of the discharge from the facility. In addition, the permittee shall keep a copy of the notification submitted to the division together with the (C)NMP. The notification shall include the following information:
  - a. Description of the discharge: A description and cause of the discharge, including a description of the flow path to the receiving water body. Also, an estimation of the flow rate and volume discharged.
  - b. Time of the discharge: The period of discharge, including exact dates and times, and the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the discharge.
  - c. Cause of the discharge: If caused by a precipitation event(s), information from the onsite rain gauge concerning the size of the precipitation event must be provided.
- 2. Enter "Sample Measurement" data for each parameter under "Quantity" and "Quality" in units specified in permit. "Average" is normally arithmetic average (geometric average for bacterial parameters) of all sample measurements for each parameter obtained during "Monitoring Period"; "Maximum" and "Minimum" are normally extreme high and low measurements obtained during "Monitoring Period".
- 3. Where violations of permit requirements are reported, attach a brief explanation to describe cause and corrective actions taken, and reference each violation by date.
- 4. Enter "Name/Title of Principal Executive Officer" with "Signature of Principal Executive Officer or Authorized Agent", "Telephone Number", and "Date" at bottom of form.
- 5. Mail signed Report to Office(s) by date(s) specified in permit. Retain copy for your records.
- 6. More detailed instructions for use of this Discharge Report Form may be obtained from Office(s) specified in the permit.

#### Legal Notice

Penalties for violating the terms and conditions of a permit and/or the Water Quality Control Act are assessed on a case by case basis according to the actual or potential environmental harm that has resulted in each instance. The Water Quality Control Act authorizes the department to assess up to \$10,000.00 per day, per violation, according to those conditions.

## PERMIT NUMBER: SOP-09033

## DISCHARGE REPORT FORM

(NOTE: Read instructions before completing this form.) \* Required notification information per section I.B.3., Discharge Notification, may be included with this form. \*

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

DISCHARGE INFORMATION:

NAME Phonhthongs	/ Farm						DATE:		TIME:	**	,
ADDRESS 303 Big Springs	s Road						DURATION:	4 1 1 1 1 1 1 1 1			
Bell Buckle, TN 37020	37020	! ! ! !				<u>.</u>	FLOW RATE:	1 1 1 1 1 1 1 1 1 1	VOLUME ESTIMATE	щ	
FACILITY Phonthongsy Farm	arm	; ; ; ; ; ;				DE	DESCRIPTION:				
Location Bedford County, Tennessee	, Tennessee					1	;				
	Phonhthongsy						CAUSE:				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
PARAMETER		nσ	QUANTITY OR LOADING			QUALITY OR CONCENTRATION	CENTRATION		FREQUENCY OF	-	i di
		Average	Maximum	Units	Minimum	Average	Maximum	Units	ANALYSIS	SAMPLE ITPE	175
Nitrogen Nitrate Total	SAMPLE MEASUREMENT	****	*****	***	****	****			01/DS	GR	*
(as N) EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	******	****	*****	******	REPORT		Once per Discharge	Grab	Q
Phosphorus, Total	SAMPLE MEASUREMENT	*****	*****	***	*****	****		1	01/DS	GR	~
(as P) EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	****	******	**	******	******	REPORT	mg/L	Once per Discharge	Grab	q
Phosphorus,	SAMPLE MEASUREMENT	*****	*****	****	*****	*****		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	01/DS	GR	~
Dissolved EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	******	****	*****	******	REPORT	mg/L	Once per Discharge	Grab	Q
E. Coli MTEC-MF,	SAMPLE MEASUREMENT	****	*****	**	*****	*****		144 00 1/#	01/DS	GR	~
#/100mL EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	******	REPORT	11001	Once per Discharge	Grab	<b>Q</b>
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
Name/Title Principal Executive Officer		I certify under penalty of law that this document a	at this document and	ind all attachments were	are .			Telephone	one	Date	
	prepared designed information	d under my direction or supervision in act to assure that qualified personnel propriate submitted. Based on my inquiry of the		cordance with a system erly gather and evaluate the e person or persons who	m the the tho						

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

imprisonment for knowing violations.

TYPED OR PRINTED

manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and

DΑΥ

MONTH

YEAR

NUMBER

AREA CODE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

#### General Instructions

- 1. If for any reason, there is a discharge to a water body of the state, the permittee shall make immediate oral notification within 24-hours to the Division of Water Pollution Control (division) and notify the division in writing within five working days of the discharge from the facility. In addition, the permittee shall keep a copy of the notification submitted to the division together with the (C)NMP. The notification shall include the following information:
  - a. Description of the discharge: A description and cause of the discharge, including a description of the flow path to the receiving water body. Also, an estimation of the flow rate and volume discharged.
  - b. Time of the discharge: The period of discharge, including exact dates and times, and the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the discharge.
  - c. Cause of the discharge: If caused by a precipitation event(s), information from the onsite rain gauge concerning the size of the precipitation event must be provided.
- 2. Enter "Sample Measurement" data for each parameter under "Quantity" and "Quality" in units specified in permit. "Average" is normally arithmetic average (geometric average for bacterial parameters) of all sample measurements for each parameter obtained during "Monitoring Period"; "Maximum" and "Minimum" are normally extreme high and low measurements obtained during "Monitoring Period".
- 3. Where violations of permit requirements are reported, attach a brief explanation to describe cause and corrective actions taken, and reference each violation by date.
- 4. Enter "Name/Title of Principal Executive Officer" with "Signature of Principal Executive Officer or Authorized Agent", "Telephone Number", and "Date" at bottom of form.
- 5. Mail signed Report to Office(s) by date(s) specified in permit. Retain copy for your records.
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#### Legal Notice

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#### **RATIONALE**

### Phonthongsy Farm NPDES PERMIT NO. SOP-09033 Bell Buckle, Bedford County, Tennessee

October 2009

Permit Writer: Erin O'Brien

#### I. DISCHARGER

Phonthongsy Farm 303 Big Springs Road Bell Buckle, Bedford County, Tennessee

Contact Person:

Mr. Kong Phonhthongsy 303 Big Springs Road, Bell Buckle, TN 37020 Phone Number: 615-542-1203

Nature of Business: Poultry production

SIC Code(s): 0251 (Broiler, Fryer and Roaster Chickens)

Industrial Classification: Secondary Discharger Rating: Minor

#### II. PERMIT STATUS

This application was received on June 16, 2009.

Environmental Field Office: Columbia

Primary Longitude: -86.451950 Primary Latitude: 35.623398

#### III. FACILITY ADJACENT WATERS

Kong Phonthongsy operates a poultry farm at 303 Big Springs Road in Bell Buckle, Bedford County, Tennessee. This operation is located near unnamed tributary to North Fork Creek. Phonthongsy Farm does not store liquid manure; therefore, this permit does not authorize the discharge of process wastewater pollutants to waters of the State of Tennessee.

The unnamed tributary to North Fork Creek is classified for fish and aquatic life, recreation, irrigation, and livestock watering and wildlife. The 7Q10, the seven-day, consecutive low flow

with a ten year return frequency; the lowest stream flow for seven consecutive days that would be expected to occur once in ten years, flow is zero million gallons per day (MGD).

#### IV. PERMIT LIMITS AND MONITORING REQUIREMENTS

The 100-year, 24-hour rainfall event applies to this operation because this operation is a new source, by definition. However, all manure, litter, and/or process wastewater is stored in a structure designed to exclude all stormwater, so the design storm has no impact on the waste storage facilities.

If for any reason, there is a discharge to a water of the state, the permittee shall make immediate oral notification within 24 hours to the division and notify the division in writing within five working days of the discharge from the facility. In addition, the permittee shall keep a copy of the notification submitted to the division together with the NMP. The notification shall include the following information:

- 1. Description of the discharge: A description and cause of the discharge, including a description of the flow path to the receiving water body. Also, an estimation of the flow and volume discharged.
- 2. Time of the discharge: The period of discharge, including exact dates and times, and the anticipated time the discharge is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the discharge.
- 3. Cause of the discharge: If caused by a precipitation event(s), information from the onsite rain gauge concerning the size of the precipitation event must be provided.

In the event of any overflow or other discharge from a manure storage structure, the following actions shall be taken.

- 1. Analysis of the discharge: All discharges shall be sampled and analyzed. Samples must, at a minimum, be analyzed for the following parameters: *Escherichia coli*, five day Biochemical Oxygen Demand (BOD5), total suspended solids (TSS), total phosphorus as phosphorus, dissolved phosphorus as phosphorus, total nitrogen as nitrogen, ammonia nitrogen as nitrogen, total kjdlehal nitrogen as nitrogen, nitrate, and pH.
- 2. Volume of the discharge: An estimate of the volume of the release and the date and time.
- 3. Sampling procedures: Samples shall consist of grab samples collected from the over-flow or discharges from the retention structure. A minimum of one sample shall be collected from the initial discharge (within 30 minutes).
- 4. Reasons for not sampling: If conditions are not safe for sampling, the permittee must provide documentation of why samples could not be collected. However, once the unsafe conditions have passed, the permittee shall collect a sample for the retention structure (pond or lagoon) within 30 minutes.

#### V. OTHER REQUIREMENTS

The following additional requirements will be included in the permit:

#### A. NUTRIENT MANAGEMENT PLAN

The permittee has developed and submitted for state approval (from TDA) a nutrient management plan (NMP). The NMP was prepared in accordance with NRCS Field Office Conservation Practice Standards and/or the NRCS Animal Waste Handbook. The NMP must be kept on site. The NMP is available for public review at either the Columbia Environmental Field Office or at the Tennessee Department of Agriculture, Ellington Agricultural Center in Nashville, Tennessee.

#### B. LAND APPLICATION REQUIREMENTS

All dairy, cattle, swine, poultry and veal CAFOs that land apply manure, litter, or process wastewater must apply setbacks from existing streams, lakes and sinkholes that are adequate to protect water quality, public health, well heads and groundwater, consistent with the guidelines found in 1200-4-5.14(16) (a)-(e) and in the NRCS Field Office Technical Guide.

#### C. TRANSFER TO THIRD PARTY

Prior to transferring any of manure, litter or process wastewater to a third party permittee must provide the recipient of the manure, litter or process wastewater with the most current nutrient analysis (consistent with 40 CFR § 412 and 1200-4-5.14(15)(b)), and ensure that the third party signs the Agreement for the Removal of Litter, Manure and/or Process Wastewater from an AFO form (Appendix A) to be used for land application activities that are not under the operational control of the permitted CAFO.

#### D. RECORD KEEPING

Permittee must create, maintain on site for five years, and make available to the director, upon request all records in accordance with 1200-4-5-.14(15)(d).

#### VI. PERMIT DURATION

This permit will be issued for a five year period effective from the issuance date on the title page.